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10/035,987	12/24/2001	Isaac Levanon	FLVT3001	3638

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EXAMINER	
LAZARO, DAVID R	
ART UNIT	PAPER NUMBER
2155	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/035,987	LEVANON ET AL.	
	Examiner	Art Unit	
	David Lazaro	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 July 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the amendment filed 07/08/2006.

2. Claims 1, 8, 13 and 19 were amended.

3. Claims 23 and 24 are newly added.

4. Claims 1-24 are pending in this office action.

Response to Amendment

5. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

6. Applicant's arguments with respect to claims 23 and 24 have been fully considered but they are not persuasive. See Response to Arguments.

7. The examiner notes for future reference that only a marked up version of the claim listing should be filed in accordance with 37 CFR 1.121.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1, 3-5, 8-11, 19 and 20 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,711,297 by Chang el al. (Chang) in view of U.S. Patent 6,346,938 by Chan et al. (Chan).

10. With respect to Claim 1, Change teaches a method of retrieving large-scale images over network communications channels for display on a client embedded device with limited computing capabilities for a mapping/topographic application (Col. 5 lines 24-27 and 56- 60: Client only has to have at minimum a graphic display and user interface for image-manipulation functions. Source image can be any large data file, including images, and method is operable over network environment.), said method comprising the steps of:

a) selecting, based on an operator controlled image viewpoint relative to a predetermined image, an update image parcel to display via said client device (Col. 9 lines 40-60: user controls operational viewpoint in relation to the image, an update parcel is selected as a result of this control);

b) preparing a request for said update image parcel wherein said request is associated with a request queue (Col. 9 lines 40-60: update parcel, i.e. physical coefficients, request is prepared);

c) issuing said request over a communications channel (Col. 9 lines 40-60: request transferred to the server);

d) receiving said update image parcel from said communications channel (Col. 9 lines 61-66: server receives the request and responds with the update); and

e) displaying said update image parcel as a part of said predetermined image, wherein said update image parcel uniquely forms a discrete portion of said predetermined image (Col. 9 line 61 - Col. 10 line 3: response is used to update the

display; also note Col. 7 lines 19-36 noting that update information forms discrete portions).

Chang does explicitly disclose wherein the operator controlled image viewpoint encompasses a viewing frustum placed within a three-dimensional space over the predetermined image. Chan teaches a mapping/topographic application (see abstract) wherein the operator controlled image viewpoint encompasses a viewing frustum placed within a three-dimensional space over the predetermined image (Col. 7 lines 9-42, Col. 8 lines 4-20 and Col. 18 line 46 - Col. 19 line 8)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Chang and modify it as indicated by Chan such that it further comprises wherein the operator controlled image viewpoint encompasses a viewing frustum placed within a three-dimensional space over the predetermined image. One would be motivated to have this, as Chang is not limited to medical image applications (In Chang: Col. 5 lines 64-67) and it is desirable to provide users a greater degree of viewing navigation (In Chan: Col. 1 lines 20-54).

11. With respect to Claim 3, Chang further teaches wherein said single data packet contains said update image parcel as a compressed data representation of said discrete portion of said predetermined image (In Chang: Col. 8 lines 56-67).

12. With respect to Claim 4, Chang further teaches wherein said single data packet contains said update image parcel as a fixed compression ration representation of said discrete portion of said predetermined image (In Chang: Col. 8 lines 56-67).

13. With respect to Claim 5, Chang further teaches wherein said update image parcel contains pixel data in a fixed size array independent of the pixel resolution of said predetermined image (In Chang: Col. 10 lines 46-65).

14. With respect to Claim 8, Chang teaches a method of transferring Large-scale images over a network with limited communications bandwidth (Col. 5 lines 56- 60) to a client embedded device with limited computing capabilities for a mapping/topographic application (Col. 5 lines 24-27), said method comprising:

a) requesting image parcels from a network image parcel server providing for a progressive resolution enhancement of a defined image and subject further to an ordering reflecting a current image view point relative to said defined image (Col. 9 lines 40-66);

b) receiving image parcels from said network image parcel server (Col. 9 lines 58-66), wherein said image parcels includes fixed dimension arrays of image pixel data (Col. 10 lines 46-65); and

c) displaying said image parcels as corresponding portions of said defined image (Col. 9 line 61 - Col. 10 line 3 and Col. 7 lines 19-36).

Chang does explicitly disclose wherein the current image viewpoint encompasses a viewing frustum placed within a three-dimensional space over the defined image. Chan teaches a mapping/topographic application (see abstract) wherein the operator controlled image viewpoint encompasses a viewing frustum placed within a three-dimensional space over the predetermined image (Col. 7 lines 9-42, Col. 8 lines 4-20 and Col. 18 line 46 - Col. 19 line 8)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Chang and modify it as indicated by Chan such that it further comprises wherein the current image viewpoint encompasses a viewing frustum placed within a three-dimensional space over the defined image. One would be motivated to have this, as Chang is not limited to medical image applications (In Chang: Col. 5 lines 64-67) and it is desirable to provide users a greater degree of viewing navigation (In Chan: Col. 1 lines 20-54).

15. With respect to Claim 9, Chang further teaches wherein said step of displaying includes a step of rendering of said fixed dimension arrays of image pixel data to a display of predetermined resolution wherein said fixed dimension arrays of image pixel date are sampled to obtain arrays of display pixel data corresponding to said predetermined resolution (In Chang: Col. 11 line 59 - Col. 12 line 6 and Col. 6 lines 1-52).

16. With respect to Claim 10, Chang further teaches wherein said image parcels received from said network image parcel server are received through a packetized network and wherein said fixed dimension arrays of image data are sized such that said image parcels are received in respective network packets (In Chang: Col. 9 lines 33-39).

17. With respect to Claim 11, Chang further teaches wherein said fixed dimension arrays of image data are block compressed using a fixed ration compression algorithm (In Chang: Col. 8 lines 56-67 and Col. 10 lines 46-65).

18. With respect to Claim 19, Chang teaches a display system for displaying a large-scale image retrieved over a limited bandwidth communications channel (Col. 5 lines 56- 60) on a client device with limited computing capabilities (Col. 5 lines 24-27), said display system comprising:

a) a display of defined screen resolution for displaying a defined image (Col. 9 line 61 - Col. 10 line 3 and Col. 15 lines 37-54) ;

b) a memory providing for the storage of a plurality of image parcels displayable over respective portions of a mesh corresponding to said defined image (Col. 13 lines 4-13);

c) a communications channel interface supporting the retrieval of a defined image parcel (Col. 9lines 33-66); and

d) a processor coupled between said display, memory and communications channel interface (Col. 14 lines 51 - Col. 15 line 67 describes the typical hardware/software setup for a computer in the system), said processor operative to select said defined image parcel (Col. 9 lines 40-66), retrieve said defined image parcel via said communications channel interface for storage in said memory (Col. 9 lines 40-66), and uniquely render said defined image parcel over a discrete portion of said mesh to provide for a progressive resolution enhancement of said defined image on said display (Col. 9 line 61 - Col. 10 line 3 and Col. 7 lines 19-36).

Chang does explicitly disclose displaying the defined image from an image viewpoint that encompasses a viewing frustum placed within a three-dimensional space over the defined image. Chan teaches a mapping/topographic application (see

abstract) wherein the operator controlled image viewpoint encompasses a viewing frustum placed within a three-dimensional space over the predetermined image (Col. 7 lines 9-42, Col. 8 lines 4-20 and Col. 18 line 46 - Col. 19 line 8)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the system disclosed by Chang and modify it as indicated by Chan such that it further comprises displaying the defined image from an image viewpoint that encompasses a viewing frustum placed within a three-dimensional space over the defined image. One would be motivated to have this, as Chang is not limited to medical image applications (In Chang: Col. 5 lines 64-67) and it is desirable to provide users a greater degree of viewing navigation (In Chan: Col. 1 lines 20-54).

19. With respect to Claim 20, Chang further teaches wherein said processor is responsive to said defined screen resolution and wherein said processor is operative to limit selection of said defined image parcel to where the resolution of said defined image parcel is less than or equal to said defined screen resolution (In Chang: Col. 9 lines 40-60).

20. Claims 2 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Chan and U.S. Patent 6,397,259 by Lincke.

21. With respect to Claim 2, Chang in view of Chan further teaches said communications channel is a packetized communications channel (Col. 9 lines 33-39).

Chang in view of Chan does not explicitly disclose the update image parcel is received in a single packet. Lincke teaches that image data can be reduced such that

an image parcel can be received in a single data packet (Col. 7 lines 36-54,Col. 22 lines 56-65 and Col. 64 lines 35-52). This reduces the amount of traffic on a wireless communication link and improves access to information over the communication link (Col. 7 lines 36-34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Chang in view of Chan and modify it as indicated by Lincke such that the method further comprises wherein said update image parcel is received from said packetized communications channel in a single data packet. One would be motivated to have this, as it is desirable to improve access to information available over low bandwidth networks (In Lincke: Col. 4 lines 38-40 and Col. 7 lines 36-54).

22. With respect to Claim 13, Chang teaches a method of transferring a large-scale image over a network with limited communications bandwidth for display on a client device with limited computing capabilities and having a screen of limited resolution, said method comprising:

a) selecting, for update, an image parcel having a defined parcel resolution and corresponding to a defined portion of a defined image that is displayed on a screen of defined screen resolution, wherein selection of said image parcel provides for a progressive resolution enhancement of said defined image subject to said defined parcel resolution being less than or equal to said defined screen resolution (Col. 9 lines 40-60 and Col. 6 lines 1-15 and lines 34-52);

b) requesting said image parcel from a network image parcel server by reference to said defined portion of said defined image (Col. 9 lines 40-60);

c) receiving said image parcel from said network image parcel server as data of a fixed dimension array of image pixel data (Col. 9 lines 61-66); and

d) displaying said image parcel as said defined portion of said defined image (Col. 9 line 61 - Col. 10 line 3 and Col. 7 lines 19-36).

Chang does explicitly disclose the reference to the defined image is also from an image viewpoint that encompasses a viewing frustum placed within a three-dimensional space over the defined image. Chan teaches a mapping/topographic application (see abstract) wherein the operator controlled image viewpoint encompasses a viewing frustum placed within a three-dimensional space over the predetermined image (Col. 7 lines 9-42, Col. 8 lines 4-20 and Col. 18 line 46 - Col. 19 line 8)

Chang does not explicitly disclose the image parcel is received in a single packet. Lincke teaches that image data can be reduced such that an image parcel can be received in a single data packet (Col. 7 lines 36-54,Col. 22 lines 56-65 and Col. 64 lines 35-52). This reduces the amount of traffic on a wireless communication link and improves access to information over the communication link (Col. 7 lines 36-34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Chang and modify it as indicated by Chan and Lincke such that the method further comprises requesting said image parcel from a network image parcel server by reference to said defined portion of said defined image from an image viewpoint that encompasses a viewing frustum placed

within a three-dimensional space over the defined image; and receiving said image parcel from said network image parcel server in a single data packet as a fixed dimension array of image pixel data. One would be motivated to incorporate the teachings of Chan, as Chang is not limited to medical image applications (In Chang: Col. 5 lines 64-67) and it is desirable to provide users a greater degree of viewing navigation (In Chan: Col. 1 lines 20-54). One would be motivated to incorporate the teachings of Lincke, as it is desirable to improve access to information available over low bandwidth networks (In Lincke: Col. 4 lines 38-40 and Col. 7 lines 36-54).

23. Claims 6, 7, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view Chan and of U.S. Patent 6,801,665 by Atsumi et al. (Atsumi).

24. With respect to Claim 6, Chang in view Chan does not explicitly disclose wherein said step of preparing includes associating a prioritization value to said request, wherein said prioritization value is based on the resolution of said update image parcel relative to that of other image parcels previously received by said client device; and wherein said step of issuing said request is responsive to said prioritization value for issuing said request in a predefined prioritization order.

Atsumi teaches the use of a prioritization value associated with a request for image data, the image data based on the resolution of update image data relative to other image data already received (Col. 9 line 59 - Col. 10 line 13, Col. 10 lines 46-56

and Col. 15 lines 22-37). The request is responsive to said prioritization value for issuing said request in a predefined prioritization order (Col. 10 lines 46-56).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Chang in view Chan and modify it as indicated by Atsumi such that the method further comprises wherein said step of preparing includes associating a prioritization value to said request, wherein said prioritization value is based on the resolution of said update image parcel relative to that of other image parcels previously received by said client device; and wherein said step of issuing said request is responsive to said prioritization value for issuing said request in a predefined prioritization order. One would be motivated to have this, as it is desirable to increase the speed and efficiency of image reconstruction (In Atsumi: Abstract and Col. 1 lines 2-49).

25. With respect to Claim 7, Chang in view Chan further teaches wherein said prioritization values is further based on the relative distance of said update image parcel from said operator controlled image viewpoint (In Chang: Col 9 lines 40-50).

26. With respect to Claim 21, Chang in view Chan does not explicitly disclose wherein said processor is responsive to said defined screen resolution and wherein said processor is operative to limit selection of said defined image parcel to where the resolution of said defined image parcel is less than or equal to said defined screen resolution.

Atsumi teaches the use of a prioritization value associated with a request for image data, the image data based on the resolution of update image data relative to

other image data already received (Col. 9 line 59 - Col. 10 line 13, Col. 10 lines 46-56 and Col. 15 lines 22-37). The request is responsive to said prioritization value for issuing said request in a predefined prioritization order (Col. 10 lines 46-56).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Chang in view Chan and modify it as indicated by Atsumi such that the method further comprises wherein said processor is responsive to said defined screen resolution and wherein said processor is operative to limit selection of said defined image parcel to where the resolution of said defined image parcel is less than or equal to said defined screen resolution. One would be motivated to have this, as it is desirable to increase the speed and efficiency of image reconstruction (In Atsumi: Abstract and Col. 1 lines 2-49).

27. With respect to Claim 22, Chang in view Chan further teaches wherein said processor is response to user navigation commands to define an image viewpoint relative to said defined image and wherein said processor is further operative to prioritize the retrieval of said image parcel based on the distance between said image parcel and said image viewpoint relative to said defined image (In Chang: Col 9 lines 40-50).

28. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Chan and U.S. Patent 6,608,933 by Dowell et al. (Dowell).

29. With respect to Claim 12, Chang in view of Chan does not explicitly disclose wherein said fixed dimension arrays of image data have a minimum dimension of 16x16 pixels.

Dowell teaches the use of the minimum dimension of 16x16 pixels is a known technique in image technology such as JPEG compression (Col. 5 lines 29-32). Use of JPEG compression provides for excellent image quality to compression ratios (Col. 1 lines 14-17).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Chang in view of Chan and modify it as indicated by Dowell such that wherein said fixed dimension arrays of image data have a minimum dimension of 16x16 pixels. One would be motivated to have this, as it is desirable to have high quality images while still minimizing the transmission time on networks such as the internet (In Dowell: Col. 1 lines 12-23).

30. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Chan and Lincke and in further view of Atusmi.

31. With respect to Claim 14, Chang in view of Chan and Lincke does not explicitly disclose wherein said defined image is displayed as a mesh composite of a plurality of current image parcels and wherein said step of requesting provides for prioritizing the request of said image parcel among a plurality of pending requests for image parcels

wherein the relative priority of said image parcel is based on the difference in said defined parcel resolution and the resolution of said plurality of current image parcels.

Atsumi teaches the use of a prioritization value associated with a request for image data, the image data based on the resolution of update image data relative to other image data already received (Col. 9 line 59 - Col. 10 line 13, Col. 10 lines 46-56 and Col. 15 lines 22-37). The request is responsive to said prioritization value for issuing said request in a predefined prioritization order (Col. 10 lines 46-56).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Chang in view of Chan and Lincke and modify it as indicated by Atsumi such that the method further comprises wherein said defined image is displayed as a mesh composite of a plurality of current image parcels and wherein said step of requesting provides for prioritizing the request of said image parcel among a plurality of pending requests for image parcels wherein the relative priority of said image parcel is based on the difference in said defined parcel resolution and the resolution of said plurality of current image parcels. One would be motivated to have this, as it is desirable to increase the speed and efficiency of image reconstruction (In Atsumi: Abstract and Col. 1 lines 2-49).

32. With respect to Claim 15, Chang in view of Chan and Lincke further teaches wherein the relative priority of said image parcel is further based on the distance between said image parcel and a current image viewpoint relative to said defined image (In Chang: Col 9 lines 40-50).

33. Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Chan and Lincke and in further view of Dowell.

34. With respect to Claim 16, Chang in view of Chan and Lincke does not explicitly disclose wherein said fixed dimension arrays of image data have a minimum dimension of 16x16 pixels.

Dowell teaches the use of the minimum dimension of 16x16 pixels is a known technique in image technology such as JPEG compression (Col. 5 lines 29-32). Use of JPEG compression provides for excellent image quality to compression ratios (Col. 1 lines 14-17).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Chang in view of Chan and Lincke and modify it as indicated by Dowell such that wherein said fixed dimension arrays of image data have a minimum dimension of 16x16 pixels. One would be motivated to have this, as it is desirable to have high quality images while still minimizing the transmission time on networks such as the internet (In Dowell: Col. 1 lines 12-23).

35. With respect to Claim 17, Chang further teaches said communications channel is a packetized communications channel (Col. 9 lines 33-39).

Chang does not explicitly disclose said fixed dimension array of image pixel data is block compressed to fit said image parcel in said single data packet. Lincke teaches that image data can be reduced such that an image parcel can be received in a single data packet (Col. 7 lines 36-54,Col. 22 lines 56-65 and Col. 64 lines 35-52). This

reduces the amount of traffic on a wireless communication link and improves access to information over the communication link (Col. 7 lines 36-34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method as indicated by Lincke such that the method further comprises wherein said fixed dimension array of image pixel data is block compressed to fit said image parcel in said single data packet. One would be motivated to have this, as it is desirable to improve access to information available over low bandwidth networks (In Lincke: Col. 4 lines 38-40 and Col. 7 lines 36-54).

36. With respect to Claim 18, Chang further teaches further teaches wherein said fixed dimensional arrays of image data are block compressed using a fixed ratio compression algorithm (In Chang: Col. 8 lines 56-67 and Col. 10 lines 46-65).

37. Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Lincke, Atusmi and Dowell.

38. With respect to Claim 23, Chang teaches a method of transferring a large-scale image over a network with limited communications bandwidth for display on a client device having a screen of limited resolution, said method comprising:

a) selecting, for update, an image parcel having a defined parcel resolution and corresponding to a defined portion of a defined image that is displayed on a screen of defined screen resolution, wherein selection of said image parcel provides for a progressive resolution enhancement of said defined image subject to said defined

parcel resolution being less than or equal to said defined screen resolution (Col. 9 lines 40-60 and Col. 6 lines 1-15 and lines 34-52);

b) requesting said image parcel from a network image parcel server by reference to said defined portion of said defined image (Col. 9 lines 40-60);

c) receiving said image parcel from said network image parcel server as data of a fixed dimension array of image pixel data (Col. 9 lines 61-66); and

d) displaying said image parcel as said defined portion of said defined image (Col. 9 line 61 - Col. 10 line 3 and Col. 7 lines 19-36).

Chang further teaches wherein the relative priority of said image parcel is further based on the distance between said image parcel and a current image viewpoint relative to said defined image (In Chang: Col 9 lines 40-50)

Chang does not explicitly disclose the image parcel is received in a single packet and that the fixed dimension array of image pixel data is block compressed to fist said image parcel in said single data packet. Lincke teaches that image data can be compressed such that an image parcel can be received in a single data packet (Col. 7 lines 36-54,Col. 22 lines 56-65 and Col. 64 lines 35-52). This reduces the amount of traffic on a wireless communication link and improves access to information over the communication link (Col. 7 lines 36-34).

Chang does not explicitly disclose wherein said defined image is displayed as a mesh composite of a plurality of current image parcels and wherein said step of requesting provides for prioritizing the request of said image parcel among a plurality of pending requests for image parcels wherein the relative priority of said image parcel is

based on the difference in said defined parcel resolution and the resolution of said plurality of current image parcels. Atsumi teaches the use of a prioritization value associated with a request for image data, the image data based on the resolution of update image data relative to other image data already received (Col. 9 line 59 - Col. 10 line 13, Col. 10 lines 46-56 and Col. 15 lines 22-37). The request is responsive to said prioritization value for issuing said request in a predefined prioritization order (Col. 10 lines 46-56).

Chang does not explicitly disclose wherein said fixed dimension arrays of image data have a minimum dimension of 16x16 pixels. Dowell teaches the use of the minimum dimension of 16x16 pixels is a known technique in image technology such as JPEG compression (Col. 5 lines 29-32). Use of JPEG compression provides for excellent image quality to compression ratios (Col. 1 lines 14-17).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Chang and modify it as indicated by Lincke, Atsumi and Dowell such that the method further comprises receiving said image parcel from said network image parcel server in a single data packet as a fixed dimension array of image pixel data; herein said defined image is displayed as a mesh composite of a plurality of current image parcels and wherein said step of requesting provides for prioritizing the request of said image parcel among a plurality of pending requests for image parcels wherein the relative priority of said image parcel is based on the difference in said defined parcel resolution and the resolution of said plurality of current image parcels; and wherein said fixed dimension arrays of image data has a

minimum dimension of 16x16 pixels and is block compressed to fist said image parcel in said single data packet . One would be motivated to incorporate the teachings of Lincke, as it is desirable to improve access to information available over low bandwidth networks (In Lincke: Col. 4 lines 38-40 and Col. 7 lines 36-54). One would be motivated to incorporate the teachings of Atsumi, as it is desirable to increase the speed and efficiency of image reconstruction (In Atsumi: Abstract and Col. 1 lines 2-49). One would be motivated to incorporate the teachings of Dowell, as it is desirable to have high quality images while still minimizing the transmission time on networks such as the internet (In Dowell: Col. 1 lines 12-23).

39. With respect to Claim 24, Chang further teaches further teaches wherein said fixed dimensional arrays of image data are block compressed using a fixed ratio compression algorithm (In Chang: Col. 8 lines 56-67 and Col. 10 lines 46-65).

Response to Arguments

40. Applicant's arguments with respect to claims 23 and 24 have been fully considered but they are not persuasive.

41. While the claims are newly added, claim 23 is noted as original claim 17 written in independent form. In this regards, applicant argues, "*Applicant respectfully submits that viewing an inventive step in view of a mosaic of three separate applications is a best obvious in retrospect only and there is no a priori reason why anyone would consider combining these three pieces of prior art to arrive at the method of claim 23...*" (Remarks, page 13).

42. It would seem that applicant is arguing the number of references. In response to applicant's argument that the examiner has combined an excessive number of references, reliance on a large number of references in a rejection does not, without more, weigh against the obviousness of the claimed invention. See *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991).

43. The examiner believes a proper prima facie case of obviousness has been established which includes proper motivation for making the combination. Applicant's arguments are not persuasive.

44. Applicant also makes note of the mapping/topographic application feature of the invention throughout the remarks. Claims 1, 8 and 13 are the only claims that state a relation to a "mapping/topographic application". In each of these claims, the "mapping/topographic application" is only mentioned in the preamble and is generally directed towards the intended purpose of the claimed methods. The actual body of the claim, in each of these claims, does not define subject matter that is specifically dependent on the "mapping/topographic application". Because of this, the recitation "for a mapping/topographic application" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand

alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Conclusion

45. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lazaro whose telephone number is 571-272-3986. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

David Lazaro
September 27, 2006

SALEH NAJJAR
SUPERVISORY PATENT EXAMINER